

# Species and Habitat Action Plan Assessment Form

Please refer to the accompanying guidance for information about how to complete this form and an explanation of terms used

## Field 1: Action Plan details

<b>Species/Habitat Action Plan</b>	Otter ( <i>Lutra lutra</i> )
<b>Lead Partner/Agency</b>	Environment Agency / The Wildlife Trusts
<b>Steering Group/Other organisations</b>	<i>Steering group in existence? Please state yes or no. Please list the organisations represented. YES: EA, TWT, EN, CCW, SNH, JNCC, DOENI Water UK (Champions) (Corresponding members SEPA, DANI)</i>
<b>Work programme in existence?</b>	<i>Please state yes or no. If in existence, please use the agreed work programme to update Field 3 and Table B.</i> YES

## Field 2: Objectives and targets overview

Please list the targets for the action plan, indicating in which country/region the target is applicable, and additional comments including the rationale for new targets. For each new target please add new sequential paragraph numbers and target text. Please provide information about progress and country disaggregation in Table A for all targets.

Number and text	UK	E	NI	S	W	Comments
4.1 Maintain and expand otter populations.	X					More detailed targets to assess progress described in Table A
4.2 By 2010, restore breeding otters to all catchments and coastal areas where they have been recorded since 1960.	X					As above.

## Field 3: Proposed actions overview

Please list the proposed actions for the action plan, indicating in which country/region the action is applicable. For each new action please add new sequential paragraph numbers and action text. If the action is regarded as significant (please see guidance) indicate this in the box and provide further details in Table B. For actions not regarded as significant simply state if the action is ongoing or complete. Remember any action which is being dropped from the workplan will be regarded as significant for the first round of reporting.

Number and text	UK	E	NI	S	W	Action significant?	Action complete or ongoing? (Please state yes, not started, or ongoing.)
5.1.1 Seek to secure agreement on the UK Framework for Otter Conservation (ACTION: JNCC).	X					NO	COMPLETE
5.1.2 Seek to ensure management agreements and incentive schemes (e.g. ESAs, Countryside Stewardship and Tir Gofal) take account of the requirements of otters in occupied areas. (ACTION: DANI, MAFF, SOAEFD, WOAD).	X					NO	ONGOING

5.1.3	Seek to determine by 2000 Statutory Water Quality Objectives for standing and running waters in Britain which will sustain otters. (ACTION: DETR, EA, OFWAT, SEPA, SOAEFD, Water UK, WO).	X					YES	SOME ELEMENTS STARTED
5.1.4	Review the protection afforded to otters by current legislation and investigate the usefulness and appropriateness of licensing to control release of otters. (ACTION: CCW, DETR, EN, JNCC, SNH).	X					NO	STARTED
5.1.5	Identify and resolve problems with existing legislation. Seek to clarify the definition of “trap” in the WCA 1981 and resolve inconsistencies over the use of otter guards on fishtraps. (ACTION: CCW, DETR, EN, JNCC, SNH).	X					YES	ONGOING
5.2.1	Seek to include action for otters in Local Environment Agency Plans for all areas by 2005, including “otter havens” in relevant areas. (ACTION: DANI, EA, SEPA, MAFF, WOAD.)		X			X	YES	
5.2.2	Continue to secure appropriate management of riparian habitats and catchments in woodlands to maintain or enhance otter populations. (ACTION:FA).	X					NO	ONGOING
5.2.3	Produce catchment based local habitat management plans identifying key areas for restoration and enhancement (ACTION:EA).		X			X	YES	STARTED
5.3.1	Seek to establish an “Otter Forum” to co-ordinate conservation, information, exchange, publicity and research. (ACTION: JNCC).	X					NO	NOT STARTED?
5.3.2	Ensure otter releases are carried out only under the guidelines set out in the Framework for Otter Conservation. (ACTION: CCW, DOENI, EN, SNH, JNCC).	X					NO	
5.3.3	Attempt to limit accidental killing or injury (for example, by provision of road underpasses and fyke net guards), particularly on key catchments. (ACTION: DoE(NI), DETR, LAs, EA, SEPA).	X					YES	

5.4.1	Ensure the provision of information on otter requirements and conservation to key groups, to include land owners, through the publication of posters and guidelines. (ACTION: CCW, DoE(NI), EN, FA, SNH).	X					YES	STARTED
5.5.1	Collate information on prey productivity, biomass and pollution in occupied and likely re-colonisation areas. (ACTION: DANI, DoE(NI), ITE, JNCC, EA, SEPA, SOAEFD, WOAD).		X			X	YES	
5.5.2	Develop a standard methodology to analyse the level of pollution accumulated in otters. (ACTION: DANI, DoE(NI), JNCC, EA, SEPA, SOAEFD, WOAD).	X					NO	STARTED
5.5.3	Investigate the effects of disturbance on otter populations. (ACTION: DoE(NI), JNCC, EA, SEPA).	X					NO	NOT STARTED
5.5.4	Develop and implement methods to estimate otter numbers and permit population modelling. (ACTION: DoE(NI), JNCC, EA, SEPA)	X					YES	
5.5.5	Monitor populations and distribution of otters throughout the UK, including local survey to monitor the expansion of fringe populations. (ACTION: JNCC)	X					YES	
5.5.6	Pass information gathered during survey and monitoring of this species to JNCC in order that it can be incorporated in a national database and contribute to maintenance of an up-to-date Red List. (ACTION: CCW, DoE(NI), EN, SNH).	X					NO	ONGOING
5.5.7	Develop a methodology for identifying otter breeding areas and produce guidelines for the protection and creation of breeding habitat. (ACTION: CCW, EA, EN, SEPA, SNH).	X					YES	
5.6.1	Use this popular species to publicise the importance of water quality and riparian habitats to biodiversity. (ACTION: CCW, DoE(NI), EN, FA, JNCC, SNH, EA, SEPA).	X					YES	

#### Field 4: Assessment of status

Please tick the appropriate category to indicate the assessment of status of the species or habitat, for each country/region where appropriate, and provide a statement supporting the category selected.

	Not appropriate	Recovered	Signs of recovery	No change	Declining	Lost	Insufficient information
UK							
England			X				
Northern Ireland							X
Scotland			X				
Wales			X				
Brief text description justifying assessment of status: (~ no more than 100 words for each country/region)							
<p><b>England:</b> Extensive surveys in 1977-79, 1984-86 and 1991-94 have shown a significant trend towards recovery from surviving strongholds in south-west and parts of Northern England. Little information of numbers of animals but clear geographical expansion is evident with the numbers of positive sites in the three surveys being 6%, 9% and 22%. More local surveys have subsequently indicated further expansion. In eastern England the expansion is due to the release and breeding of captive bred otters.</p> <p><b>Wales:</b> Surveys in 1977-78, 1984-85 and 1991 have shown an increase in positive sites from 20% to 30 % and 53%. Further expansion is indicated by spot-checks and local surveys but parts of the South and the north west probably support small numbers of animals.</p> <p><b>Scotland:</b> Strong populations were maintained throughout most of Scotland during the period of decline in England and Wales with 73% of sites positive in 1977-79. Between the 1977-79 and 199 -94 surveys, the percentage of the area of Scotland, on a 10km square basis, fell from 10% to 1.8%. The limited areas without otters are now confined to southern and central Scotland, the Firth of Forth and the south east.</p> <p><b>Northern Ireland:</b> Had maintained good populations with approximately 85% of sites positive in 1981. Lack of comparable surveys since that time makes it difficult to judge whether its status as a stronghold has been maintained.</p>							

#### Field 5: Summary statement

Please provide an overview of plan implementation, including new factors affecting the species or habitat which will accelerate or constrain progress towards meeting of the targets. Where a factor results in new action(s) please cross-reference back to the relevant numbers under Field 3 and Table B.

Progress has been made towards achieving the majority of actions in the Action Plan, especially those given highest priority in the Work Plan. The sequence of national surveys up to 1991-94 suggests progress towards the Action Plan objectives and this is supported by local surveys and reports. However there have been no more recent extensive surveys to assess whether the rate of progress is in line with proposed targets, especially in the case of Northern Ireland. Lack of resources is the only significant constraint to monitoring.

A new action (5.2.3) has been added to the Action Plan to incorporate practical habitat conservation work for the otter that has been taking place for several years and continues to do so. Habitat creation and enhancement projects, including the creation of riparian buffer zones and wetlands, planting and artificial holts, have been implemented across the UK by The Wildlife Trusts, the Environment Agency and other organisations. Since 1998 the Water UK and The Wildlife Trusts Otters and Rivers Project (OARP), supported by the Environment Agency and Brffward has developed considerably to undertake otter, river and wetland conservation work targeted on the Action Plan objectives.

There have been interesting developments with regard to identifying otters using a DNA finger printing technique and hence improving our understanding of otter ecology. Developments are also anticipated in our understanding of breeding requirements in the near future.

Road deaths are still considered to be a significant threat where populations are small, such as areas of recent recolonisation but means of reducing such mortalities are becoming established and used.

**Field 6: Signing off**

Please 'sign off' the form below to confirm that steering group members or key contacts have been consulted and agreed the information provided.

Contact details	Lead Partner	Contact Point
Name	Teg Jones Lisa Schneidau	Teg Jones
Organisation	Environment Agency The Wildlife Trusts	Environment Agency
Assessment date (dd/mm/yy)	15.9.99	

Completed forms should be submitted to JNCC

Biodiversity Information Service

Joint Nature Conservation Committee

Monkstone House

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**Table A: Action Plan objectives and targets (Copiable table)**

For each target please state how, if applicable, it has been disaggregated to the country level. Please insert the paragraph number, UK target and country-specific disaggregated target(s) into the table. Please tick the appropriate category to indicate progress against published and disaggregated targets. For each target please copy the table and detail the (existing or new [new paragraph numbers should run sequentially, under relevant headings in the published volumes]) paragraph number, target text and an assessment of progress.

Objective/target (For new or revised targets please provide the new paragraph number and target text.)	4.1 Maintain and expand existing otter populations				
Country	Not appropriate	Target achieved	Some progress	No progress	Insufficient information
UK			X		
England			X		
Northern Ireland					X
Scotland			X		
Wales			X		

Text description of target progress (separate for each country/region):

In order to assess progress towards this objective the Steering Group has agreed the following broad targets, based principally on predicted recovery rates in Strachan and Jefferies 1996. The figures relate to the % age of positive sites in national surveys.

	Year 2002	Year 2010
England	50%	65%
Northern Ireland	90%	95%
Scotland	90%	95%
Wales	65%	70%

Note: For England the overall figures mask considerable regional variation.

The most recent surveys indicated the following status, expressed as % age of positive sites.

England (1991-94)	22%
Northern Ireland (1980-81) (from Ireland survey, estimated only)	85%
Scotland (1991-94)	88%
Wales (1991)	53%

These values are significant increases on previous results but there has been no equivalent survey since the BAP initiative. Measurement of progress will depend on repeating the national surveys at the appropriate times. While the Steering Group is seeking to undertake a survey of England in the period 1999-2001, it is unlikely that the resources can be found to undertake large scale surveys elsewhere. Surrogate measures may therefore be necessary to assess progress.

Ref: Strachan, R. S., Jefferies, D. J. (1996). Otter Survey of England 1991-1994 : A report on the decline and recovery of the otter in England and on its distribution, status and conservation 1991-1994. The Vincent Wildlife Trust, London.

**Table A: Action Plan objectives and targets (Copiable table)**

For each target please state how, if applicable, it has been disaggregated to the country level. Please insert the paragraph number, UK target and country-specific disaggregated target(s) into the table. Please tick the appropriate category to indicate progress against published and disaggregated targets. For each target please copy the table and detail the (existing or new [new paragraph numbers should run sequentially, under relevant headings in the published volumes]) paragraph number, target text and an assessment of progress.

<b>Objective/target</b> (For new or revised targets please provide the new paragraph number and target text.)	4.2 By 2010, restore breeding otters to all catchments and coastal areas where they were recorded in 1960.				
<b>Country</b>	<b>Not appropriate</b>	<b>Target achieved</b>	<b>Some progress</b>	<b>No progress</b>	<b>Insufficient information</b>
<i>UK</i>			X		
<i>England</i>			X		
<i>Northern Ireland</i>			X		
<i>Scotland</i>			X		
<i>Wales</i>			X		

Text description of target progress (separate for each country/region):

- Some progress towards this objective. The only “survey” information available prior to 1960 is that provided by Stephens (1957). On the basis of that information and that provided by hunt records (Chanin and Jefferies 1978), the Steering Group has adopted the approach of assuming that otters were present and breeding in all catchments except those within major conurbations. This approach may be fine-tuned following further consultation.
- The current (1998) status of breeding otters has been agreed by the Steering Group following consultation by principal partners and is based on subjective, expert opinion. Subsequently the following provisional targets have been adopted as a pragmatic approach and their measurement will again be based on expert opinion.
- In England and Wales the map-based targets are based on the 162 Environment Agency catchments as originally prepared by the NRA (1994). In numerical terms they are:
 

Current	(1998)	59	Catchments positive	(36%)
Interim	(2002)	98	Catchments positive	(60%)
Interim	(2006)	129	Catchments positive	(80%)
Final	(2010)	154	Catchments positive	(95%)
- Current information on Northern Ireland indicates that all catchments (as defined by the Environment and Heritage Service) support breeding otters. The target is therefore to maintain 100%.
- The target for Scotland is 100%.
- These targets and the catchment maps on which they are based will be refined in 2000.

Note: For a catchment to be considered positive there needs to be evidence (sighting of cubs or prints etc.), confirmed by a known surveyor at a minimum of one site within a catchment. The Steering Group is aware that “catchments” vary considerably and are conscious of the limitations of these targets in assessing conservation status.

Refs: Chanin, P. J., Jefferies, D. J. (1978). The decline of the otter *Lutra lutra* L. in Britain : an analysis of hunting records and discussion of causes. *Biological Journal of the Linnean Society* 10 (3): 305-328.

Stephens, M. N. (1957). The natural history of the otter. Universities Federation For Animal Welfare, London.

**Table B: Proposed actions (Copiable table)**

For each significant action please copy and complete the table below.

<b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)	5.1.5 Identify and resolve problems with existing legislation. Seek to clarify the definition of traps in WCA 1981 and resolve inconsistencies over the use of otter guards on fish traps (CCW, DETR, EN, JNCC, SNH).	
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	<p>A. Clarify the definition of trap in WCA 1981 (Lead: JNCC).</p> <p>B. Review fisheries legislation including bylaws on otter guards and fish Nets (Lead: EA).</p> <p>C. Introduce bylaws to require the use of otter guards on fyke nets in Northern Ireland</p>	
<b>Action/workplan undertaken?</b> (Please state yes or no.)	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	<p>A. JNCC undertaking an ongoing review of wildlife legislation. It is currently considered that clarification of a trap through legal opinion would not be of benefit and that amending primary legislation would not have Parliamentary time at present. Therefore no significant progress on this issue.</p> <p>B. A review of fisheries legislation is currently taking place, which should rationalise bylaws on the use of otter guards on fyke nets in England and Wales.</p> <p>C. No progress.</p>	<p>Action by JNCC, CCW, DETR, EN, SNH</p> <p>EA</p>
<b>Constraints to action</b> (Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)	A. Costs of legal opinion; lack of Parliamentary time.	
<b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)	ONGOING	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	<p>B. Implementation of bylaws 2000/2001.</p> <p>C. Initiate consultation 2000/2001.</p>	<p>Action by EA</p> <p>DOE(NI)</p>

**Table B: Proposed actions (Copiable table)**

For each significant action please copy and complete the table below.

<b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)	5.1.3 Seek to determine by 2000 Statutory Water Quality objectives for Standing and running in Britain which will sustain otters (DETR, OFWAT, EA, SEPA, SOEFD, WATER UK, WO). Note: The legislative framework for SWQOS exists only in England and Wales.	
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	A. Identify water quality requirements to sustain otters (Steering Group). B. Identify areas where water quality limiting otter distribution (LEAD: SEPA, EA, DANI). C. Incorporate water quality requirements of otters in SWQOs (LEAD: EA). D. Collect water quality, quantity data and RHS data for Scottish Rivers and supply to Lead Partners ( LEAD: SEPA).	
<b>Action/workplan undertaken?</b> (Please state yes or no.)	NO	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>		
<b>Constraints to action</b> (Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)	A. Awaiting information from Action 5.5.1., which may provide limited information. B. As above. However the SEPA report (Scotland's Water, July 1999) demonstrated largely excellent or good water quality in both fresh and tidal waters in Scotland C. While the River Ecosystem Classification has been agreed and trialled, there has been no progress by DETR on implementation. D. To be linked to A and B above.	Action by EA,  EA,SEPA, DANI, WATER UK  EA, WATER UK  SEPA
<b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)	Ongoing	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	Following completion of Action 5.5.1 some progress will be made on A and B above, anticipated 2000/2001. No information on implementation of SWQOs.	Action by EA

**Table B: Proposed actions**

Produced by JNCC's Biodiversity Information Service, 31/07/03

<b>Published action/organisation responsible</b>	5.2.1 Seek to include action for otters in Local Environment Agency Plans for all areas by 2005, including “otter havens” in relevant areas. (DANI, EA, SEPA, MAFF, WOAD)	
<b>Work Plans/Organisation responsible</b>	A. Ensure appropriate action to benefit otters identified in all LEAPs. (EA) B. Ensure cross-referencing between LEAPs and Local BAPs. (LEAD: EA) C. SEPA to produce a guidance sheet on habitat requirements of otters for use by SEPA staff involved in catchment management projects. (LEAD: SEPA) D. Review implementation of LEAP actions for others. (LEAD: EA, TWT) E. Input information structure/local plans to secure actions to protect and benefit otters. (LEAD: SG)	
<b>Action/Workplan Undertaken</b>		
<b>Description of work undertaken and organisation responsible</b>		
<b>Output and timescale</b>	A. LEAP consultation reports and Action Plan in production for completion by 2005. B. Taking place during above process by 2005. C. Completed. Issued April 1999. D. Following publication of Actions Plans, reviews to take place annually. E. Ongoing.	Action by EA  EA  SEPA  EA  LA's,TWT, EA, EN, CCW, SNH, SEPA
<b>Constraints to action</b>	A–E. Costs of implementation of actions.	
<b>Action complete or ongoing</b>	Ongoing.	
<b>Next Steps</b>		
<b>Output and timescale</b>	A-E. Implementation 200+	Action by: EA, EN, CCW,SNH, SEPA,TWT

**Table B: Proposed actions (Copiable table)**

For each significant action please copy and complete the table below.

Produced by JNCC's Biodiversity Information Service, 31/07/03

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.2.3 NEW ACTION Produce catchment based local habitat management plans identifying Key areas for restoration and enhancement (EA).	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	A. Identify Key areas for action ( Lead: EA, TWT (OARP), Regional Otter BAP Groups). B. Implement restoration or enhancement projects (Lead: TWT (OARP), EA).	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	<p>A. (a) The Wildlife Trusts Otter Action Plan categorises areas requiring different actions to meet objectives. (1998), filtering down to Local Plans and implemented by approximately 20 OARP officers.</p> <p>(b) EA Otter Conservation Strategy (developed from NRA Strategy) provides a framework for determining action appropriate to catchment or subcatchments and producing Regional and Catchment Action Plans. (1999)</p> <p>(c) Regional Otter BAP Groups set up throughout England and Wales to identify needs and Priorities and co-ordinate actions on a Regional level. (1998+)</p> <p>B. A large number of habitat enhancement projects have already been undertaken, principally in England and Wales. These will continue on a more targeted basis in the future but generally already derive from existing strategies or perceived local needs.</p>	<p>Action by TWT (OARP)</p> <p>EA</p> <p>Reg Groups</p> <p>EA, TWT (OARP) LAs, WATER UK</p>
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	A. Manpower resources to produce the necessary plans. B. Costs of implementation.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	ONGOING	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	<p>A. (a) TWT will continue developing and reviewing plans.</p> <p>(b) Completion of EA Regional and Catchment Otter Action Plans 2000/2001.</p> <p>B. Continuing programme of projects (2000+). TWT (OARP) will continue proactive work until at least June 2001.</p>	<p>Action by TWT</p> <p>EA</p> <p>TWT (OARP), EA, LAs, WATER UK</p>

**Table B: Proposed actions (Copiable table)**

For each significant action please copy and complete the table below.

<b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)	5.3.3 Attempt to limit accidental killing or injury (for example by provision of road underpasses and fyke net guards) particularly on Key catchments. (DOE(NI), DETR, LAs, EA, SEPA).								
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	<p>A. Produce guidelines on road bridge designs to protect otters. (Lead: DETR)</p> <p>B. Monitor benefits of otter underpasses and other design features. (Lead: DETR)</p> <p>C. Identify sensitive locations requiring design features to protect otters. (Lead: TWT, EA)</p> <p>D. Promote good design and give advice in response to road schemes. (Lead: TWT, EA)</p> <p>E. Pass on best practice advice developed by others. (Lead: SEPA, SNH)</p> <p>F. Consider the need to monitor otter populations where the use of mink hounds may cause disturbances. (Lead: TWT)</p>								
<b>Action/workplan undertaken?</b> (Please state yes or no.)	YES								
<b>Description of work taken and organisation responsible</b>	Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.								
<b>Output and timescale</b>	<table border="1"> <tr> <td>A. The Highways Agency have produced a draft Advice Note (Nature Conservation Advice in Relation to Otters HA 81/99) to be included in the Design Manual for Roads and Bridges Vol 10, based on Studies undertaken by <b>WildCRU</b> (Oxford University and others.</td> <td>Action by DETR</td> </tr> <tr> <td>B. HA research taking place.</td> <td>DETR</td> </tr> <tr> <td>C. Projects completed or taking place in Southern England, North East England and Wales and a national programme under consideration.</td> <td>EA, TWT (OARP), DETR</td> </tr> <tr> <td>D. Ongoing in response to schemes by OARP and EA. Included in EA's Otter and Rivers Handbook to be published September 1999. Proactive targeting of Highways Departments has begun in some areas.</td> <td>TWT (OARP), EA</td> </tr> </table>	A. The Highways Agency have produced a draft Advice Note (Nature Conservation Advice in Relation to Otters HA 81/99) to be included in the Design Manual for Roads and Bridges Vol 10, based on Studies undertaken by <b>WildCRU</b> (Oxford University and others.	Action by DETR	B. HA research taking place.	DETR	C. Projects completed or taking place in Southern England, North East England and Wales and a national programme under consideration.	EA, TWT (OARP), DETR	D. Ongoing in response to schemes by OARP and EA. Included in EA's Otter and Rivers Handbook to be published September 1999. Proactive targeting of Highways Departments has begun in some areas.	TWT (OARP), EA
A. The Highways Agency have produced a draft Advice Note (Nature Conservation Advice in Relation to Otters HA 81/99) to be included in the Design Manual for Roads and Bridges Vol 10, based on Studies undertaken by <b>WildCRU</b> (Oxford University and others.	Action by DETR								
B. HA research taking place.	DETR								
C. Projects completed or taking place in Southern England, North East England and Wales and a national programme under consideration.	EA, TWT (OARP), DETR								
D. Ongoing in response to schemes by OARP and EA. Included in EA's Otter and Rivers Handbook to be published September 1999. Proactive targeting of Highways Departments has begun in some areas.	TWT (OARP), EA								
<b>Constraints to action</b> (Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)	Advice on design and mitigation is now available and can be incorporated into new road schemes. The assessment of existing bridges and culverts will have significant cost implications and mitigations works will be limited by the resources available.								
<b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)	ONGOING								
<b>Next steps</b>	Please outline future action/work including an indication of expected output, timescale and organisation responsible.								

<b>Output and timescale</b>	<p>A. Publication of Advice Note (1999).</p> <p>B. Ongoing.</p> <p>C. Projects in Southern England and Wales – identification of “blackspots” and mitigation.</p> <p>D. Implementation 2000+.</p> <p>E. Awaiting completion of A. SNH Booklet – Otters &amp; Development to be published in revised form in 2000.</p>	<p><i>Action by</i> DETR</p> <p>DETR</p> <p>EA/ TWT (OARP)/ DETR</p> <p>DETR/LAs/ TWT(OARP)</p> <p>SNH</p>
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**Table B: Proposed actions (Copiable table)**

For each significant action please copy and complete the table below.

<b>Published action/organisation(s) responsible</b> (For new or revised actions please provide the new paragraph number and action text.)	5.4.1 Ensure the provision of information on otter requirements and conservation to Key groups, to include landowners, through the publication of posters or guidelines. (CCW, DOE(NI), EN, FA, SNH)	
<b>Work plan/organisation(s) responsible</b> (Summary of work plan agreed by the steering group, broken down by year if possible.)	A. Produce educational and advisory material aimed at targeted professionals and other Key groups. (LEAD: TWT) B. Publish updated edition of EA Otters and Rivers Handbook. (LEAD: EA) C. Undertake project on log-pile holt utilisation and design. (LEAD: TWT, EA) D. Develop and promote Farm Biodiversity Action Plans. (LEAD: FWAG)	
<b>Action/workplan undertaken?</b> (Please state yes or no.)	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	A. A variety of local materials have been produced by TWT (OARP) and some national documents produced. B. Handbook published September 1999. C. Project completed June 1999, report produced September 1999. D. Actions for Otters now included in a large number of Farm Biodiversities Action Plans.	Action by TWT (OARP)  EA TWT (OARP) /EA  FWAG
<b>Constraints to action</b> (Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)	Progress on A and D is limited by resources.	
<b>Action complete or ongoing?</b> (Please state yes, not started, or ongoing.)	ONGOING	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	A. Identify needs, costs. Revised booklet, "Otters & Development", to be published by SNH in 2000. D. Ongoing.	Action by TWT (OARP), SNH, FWAG

**Table B: Proposed actions (Copiable table)**

Produced by JNCC's Biodiversity Information Service, 31/07/03

For each significant action please copy and complete the table below.

<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.5.1 Collate information on prey productivity, biomass and pollutions in occupied and likely recolonisation areas. (DANI, DOE(NI), ITE, JNCC, EA, SEPA, SOAEFD, WOAD)	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	A. Prepare project proposal and undertake. (LEAD:EA) B. SEPA to contribute data on pollution and environmental quality to EA. (LEAD: SEPA)	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	A. Project approved July 1999, commenced August 1999. B. SEPA is managing a research contract on behalf of Scotland and Northern Ireland Forum for Environmental Research, to review existing data on contaminants in otter carcasses. Network set up for collection of tissue samples from road traffic deaths in Northern Ireland.	Action by EA EA/SEPA
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	Availability and quality of data.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing.	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	A. Completion of project March 2000. B. Contract to be completed 1999.	Action by EA SEPA

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<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.5.4 Develop and implement methods to estimate otter numbers and permit population modelling. (DOE(NI), JNCC, EA, SEPA)	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	A. Undertake a feasibility study on use of DNA in spraint to identify individual otters and relationships. (LEAD: EA) B. Encourage the use of novel techniques for population estimates. (LEAD: Steering Group)	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	A. Study reported 1999.	Action by EA, TWT (OARP), EXETER UNIV. AND ABERDEEN UNIV
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	A. While the technique is promising it is costly in terms of laboratory costs and manpower needs. Further development required to increase the rate of successful analysis and accuracy.	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing.	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	A. Project for further development proposed by Exeter University. EA providing some financial support but further contribution required to progress. Work also proposed on Spey. B. A proposal for a novel technique has been put forward by Cardiff University and is being considered by EA and others.	Action by EA, EXETER UNIV, SNH

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<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.5.5 Monitor populations and distribution of otters throughout the UK, including local survey to monitor the expansion of fringe populations (JNCC)	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	<p>A. Undertake national surveys to monitor long-term trends (Steering Group)</p> <p>B. Undertake local and regional surveys in response to specific needs (LEAD: TWT, EA, RSPB)</p> <p>C. Act as local contacts for otter sightings and records (LEAD: TWT,EA)</p>	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	<p>A. Steering Group is developing funding and methodology for next National Survey of England, to start in 2000. Surveys in other countries not yet planned</p> <p>B. Local and regional surveys being carried out according to perceived need (mostly by TWT through Otters and Rivers Project). Efforts made to co-ordinate this nationally through the Regional Otter BAP group structure..</p> <p>C. Ongoing</p>	<p>Action by Steering Group</p> <p>TWT(OARP), EA, JNCC, WATER UK</p> <p>TWT(OARP), EA</p>
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	Lack of funding	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	<p>A. National Survey of England scheduled to be completed June 2001.</p> <p>B. Co-ordination of regional surveys through Regional Otter BAP groups and TWT (Otters and Rivers Project), ongoing.</p> <p>C. Ongoing</p>	<p>Action by TWT (OARP), EA, EN, Water UK? TWT (OARP), JNCC?</p> <p>TWT</p>

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<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.5.7 Develop a methodology for identifying otter breeding areas and produce guidelines for the protection and creation of breeding habitat. (CCW, EA, EN, SEPA, SNH)	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	A. Incorporate investigation into Research and Development Programmes. B. Monitor success of breeding habitat protection and creation and other conservation measures.	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	A. EU Life Project – Natura 2000 Rivers incorporates an otter breeding study (2004). B. Monitoring ongoing by TWT (Otters and Rivers Project)	<i>Action by</i> CCW, EA, EN, SEPA, SNH. TWT (OARP)
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	Lack of funding	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	?	<i>Action by</i>

**Table B: Proposed actions (Copiable table)**

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<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.6.1 Use this popular species to publicise the importance of water quality and riparian habitats to biodiversity (CCW, DOE (NI), EN, EA, JNCC, SNH, SEPA)	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>	A. Hold regional workshops on otter conservation B. Develop otter volunteer task force across the UK C. SEPA public affairs and conservation specialists to identify appropriate opportunities to promote otter conservation related to SEPA's work	
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>	YES	
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>	A. Workshops, talks, displays and other events held across the country as part of Otters and Rivers Project  B. Volunteer task force being developed (well over 1000 volunteers) as part of Otters and Rivers Project  C. Importance of good riparian habitats emphasised in SEPA's "Farming and Watercourses" best practice grids produced in 1998.	Action by TWT, WATER UK   TWT (OARP)  SEPA
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>	Lack of funding	
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>	Ongoing	
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>	A. Work on Otters and Rivers Project continues to at least 2001  B. Work though Otters and Rivers Project continues to at least 2001  C. Opportunities in SEPA's Habitat Enhancement initiatives for management of standing and urban waters, fishery management and tidal water 2000.	Action by TWT (OARP)  TWT (OARP)  SEPA

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<b>Published action/organisation(s) responsible</b> <i>(For new or revised actions please provide the new paragraph number and action text.)</i>	5.1 etc	
<b>Work plan/organisation(s) responsible</b> <i>(Summary of work plan agreed by the steering group, broken down by year if possible.)</i>		
<b>Action/workplan undertaken?</b> <i>(Please state yes or no.)</i>		
<b>Description of work taken and organisation responsible</b>	<i>Please provide details of progress to date, including information about outputs, deadlines, which organisations and where action is being undertaken.</i>	
<b>Output and timescale</b>		<i>Action by</i>
<b>Constraints to action</b> <i>(Please provide an explanation of the significant issues or difficulties encountered and how they have been or will be resolved. Any constraints which the steering group are unable to resolve should also be detailed.)</i>		
<b>Action complete or ongoing?</b> <i>(Please state yes, not started, or ongoing.)</i>		
<b>Next steps</b>	<i>Please outline future action/work including an indication of expected output, timescale and organisation responsible.</i>	
<b>Output and timescale</b>		<i>Action by</i>